
I-0394: Iteration Must Cover All Scopes

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STATUS: Reposted for External Review
TYPE: NIAP Interpretation

TITLE: Iteration Must Cover All Scopes
COMMENTS DUE BY: Friday, December 1, 2000 to IWG@gibraltar.ncsc.mil

SOURCE REFERENCE: CC v2.1 Part 2 Subclause 2.1.4.1
CEM v1.0 Part 2 Subclause 3.4.5 APE_REQ.1
CEM v1.0 Part 2 Subclause 4.4.6 ASE_REQ.1

RELATED TO:
[I-0362](#) Scope Of Permitted Refinements

ISSUE:

The question of "narrowing of scope" (i.e., limiting the applicability of an element) has recently been debated as to whether it is an acceptable refinement. The approach taken in CCIMB-INTERP-0098/0099 indicates that it is not. However, the CEM provides a situation in which iteration can be used to narrow scope. It is not clear from the CC and the CEM that all aspects of a requirement must be covered.

STATEMENT OF INTERPRETATION:

If iteration is used to narrow applicability to a portion of the TOE, the collection of all the iterations must cover all aspects of the requirement.

SPECIFIC INTERPRETATION:

To address this interpretation, CC v2.1 Part 2 Subclause 2.1.4.1, paragraph 75 is reworded as follows (additions marked thusly; deletions marked ~~thusly~~):

Where necessary to cover different aspects of the same requirement (e.g. identification of more than one type of user), repetitive use of the same component from this part of the CC to cover each aspect is permitted. If iteration is used to narrow the applicability, the collection of all iterations of the same requirement must cover all aspects.

The following change is made to both CEM v1.0 Part 2 Section 3.4.5 APE_REQ.1-11 Paragraph 225 "d)" and CEM v1.0 Part 2 Section 4.4.6 ASE_REQ.1-12 Paragraph 415 "d)": (additions marked thusly; deletions marked ~~thusly~~):

d) for an iteration, that each iteration of a component is different from each other iteration of that component (at least one element of a component is different from the corresponding element of the other component), or that the component applies to a different part of the TOE. In the latter case, there must be sufficient iterations that all aspects of the requirement are covered.

PROJECTED IMPACT:

Negligible impact anticipated.

SUPPORT:

Narrowing of scope is clearly not the intent of iteration. CC v2.1 Part 2 Subclause 2.1.4.1, says:

Where necessary to cover different aspects of the same requirement (e.g. identification of more than

one type of user), repetitive use of the same component from this part of the CC to cover each aspect is permitted.

The key part of this is "to cover each aspect". This implies that all aspects of the requirement must be covered by the collection of the iterations. Making that particular characteristic of iteration clear is the goal of this interpretation.